

1995 □ 2

COMPARISON IN REAL TERMS OF THE GROSS DOMESTIC PRODUCT FOR THE EUROPEAN UNION AND THE OECD

Eurostat, the Statistical Office of the European Communities, and the OECD have just established for their member states purchasing power parities that allow for 1993 a comparison in real terms of the gross domestic product (GDP) which is the main indicator of economic activity for a given year. The results at the level of GDP are presented in the attached table. More detailed results will be published later in the year.

The use of the exchange rate for international comparison of economic aggregates does not allow a real comparison of the volume of goods and services produced and used in the different countries. GDP per capita in ECU is considerably higher in Luxembourg than in Greece or in Portugal. Nevertheless, this difference corresponds not only to a higher volume of goods and services but also to a higher general price level in the first country. The calculation of purchasing power parities makes it possible to eliminate this price level difference from the comparison and thus obtain a real volume comparison between countries. The purchasing power parities between currencies are obtained using the price ratios between the different countries for a basket of goods and services both comparable and representative. The individual price ratios are aggregated according to well defined criteria up to the GDP global parity.

This note presents only the main results for GDP and per capita GDP. Purchasing power parities are expressed in relation to a reference "numéraire" which is the purchasing power standard (PPS). This "numéraire" is defined in such a way that the value of the GDP of the Community in 1993 in ECU is the same as the value expressed in PPS.

The table starts by presenting for the different countries the exchange rates and the purchasing power parities. The parity/exchange rate ratio is an index of price levels, in itself an important indicator. It measures the relation between the price level of a given country and the community average (EUR12=100).

This reveals differences of 67.0 to 124.9 for Community countries and of 49.9 to 151.8 for OECD countries between the various price levels, demonstrating the difficulties of comparing the economies of different countries using official exchange rates.

Another significant indicator for international comparisons is the per capita GDP index. It represents the relation between the per capita GDP of each country and the average per capita GDP of the Community. It is worth noting that the index can be significantly different according to whether exchange rates or purchasing power parities are used.

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Thus, Denmark, for which the per capita value index is 140.7 if the calculation is based on data in ECU, changes to a volume index of 112.4 if the conversion factor is purchasing power parities. This is related to its high price level index (124.9). The opposite phenomenon can be observed for Greece and Portugal for which per capita value indices of 46.8 and 47.1 respectively change to per capita volume indices of 63.1

and 69.0 respectively. The 1 : 3 ratio of per capita GDP between Greece and Denmark for data in ECU is no more than 1 : 1.8 if the conversion factor used is the purchasing power parity. This result alone shows the need to have purchasing power parities as a tool to obtain real volume comparisons between countries.

NOTE: The results presented here are subject to sampling and other errors; small differences between the measures are unlikely to be statistically significant.

To know more about:


- Statistics in focus: "Gross Domestic Product-official results 1993"
- Publication "National Accounts ESA- Aggregates 1970-1993"
- Publication "Comparison in real terms of the aggregates of ESA 1993 results". (in preparation).

EUROSTAT - B2: 352-4301.34447 (J.-Ph. Amotte). (GDP general).

EUROSTAT - B3: 352-4301.32996 (A. Avdoulos). (PPP questions).

Comparison in real terms for the European Union and the OECD

GDP RESULTS - 1993

 eurostat	<u>Exchange rate:</u> 1 ECU=... National currency units	<u>Purchasing power</u> <u>parities:</u> 1 PPS =...National currency units	<u>Price level index</u> EUR 12 = 100	<u>Per capita value index</u> (based on ECU values) EUR 12 = 100	<u>Per capita volume</u> <u>index</u> (based on PPS values) EUR 12 = 100
B	40.47	40.25	99.5	112.8	113.2
DK	7.594	9.485	124.9	140.7	112.4
D*	1.936	2.269	117.2	127.0	108.2
GR	268.6	198.9	74.1	46.8	63.1
E	149.1	126.2	84.6	66.0	77.8
F	6.634	7.092	106.9	117.1	110.0
IRL	0.8000	0.7066	88.3	71.6	81.0
I	1841	1655	89.9	92.2	102.4
L	40.47	42.75	105.6	172.3	160.4
NL	2.175	2.303	105.9	109.1	102.9
A	13.62	14.96	109.8	123.0	112.0
P	188.4	126.2	67.0	47.1	69.0
FIN	6.696	6.567	98.1	88.9	90.7
S	9.122	10.61	116.3	114.2	98.2
UK	0.7800	0.6878	88.2	87.4	99.0
IS	79.16	88.77	112.1	124.3	110.9
N	8.307	9.435	113.6	129.5	114.0
CH	1.730	2.300	133.0	179.7	135.2
TUR	12861	6416	49.9	15.8	31.7
AUS	1.722	1.482	86.0	86.2	100.1
NZL	2.167	1.628	75.1	68.2	90.7
JAP	130.2	197.7	151.8	182.0	120.6
CAN	1.511	1.373	90.9	102.6	112.9
USA	1.171	1.079	92.2	131.2	143.6

* Data for Germany as constituted from 3 octobre 1990.

